

never been opened, is still available in case of a final appeal. I would suggest that if there is any one still in doubt on the subject, any one who still thinks that the right cardiac valve of *Apteryx* differs from that of ordinary birds and is provided with chordæ tendineæ attached to membranous flaps, he should be asked to open Sir Richard Owen's hitherto unpenetrated third specimen at a meeting of this Society.

The first and the second specimens I have opened by an appropriate incision in the right ventricular wall, in the presence of Professor Bourne, and had no difficulty in bringing the right cardiac valve in each heart into full view. It presented none of the peculiar features attributed by Sir Richard Owen to the right cardiac valve of these identical specimens which Sir Richard believes himself to have examined, but which neither he nor any one else had seen until I opened up the ventricular wall to-day (April 24th, 1885). The valve was entirely fleshy as in an ordinary bird (compare figs. 1, 2, with figs. 3, 4). There were no radiating fibrous cords binding the mid-region of the valve to the ventricular wall, such as are shown in Sir Richard Owen's drawing. There was no departure from the typical Avian right cardiac valve; no such departure has been seen in any specimen of the *Apteryx*-heart which has been opened.

It seems important that the actual condition of the right cardiac valve in *Apteryx* should be represented pictorially, and I therefore give here two drawings of that structure taken from the specimen in my possession (figs. 3 & 4, p. 479), and also for comparison, two views of the right cardiac valve of the Common Fowl (figs. 1 & 2, p. 478), and of the *Ornithorhynchus* (figs. 5 & 6, p. 480) for comparison.

May 19, 1885.

F. Du Cane Godman, Esq., F.R.S., F.Z.S., in the Chair.

A communication was read from Prof. J. von Haast, C.M.Z.S., containing a description of some fossil remains of a species of *Dinornis* remarkable for its small size, and apparently previously undescribed, which he proposed to call *Dinornis oweni*. The remains in question, at present deposited in the Auckland Museum, had been obtained near Whangarei, New Zealand. Prof. von Haast added some remarks on *Dinornis crassus*, Owen.

This paper will be printed entire in the Society's 'Transactions.'

The Secretary read the following extract from a letter addressed to him by the Rev. G. H. R. Fisk, C.M.Z.S., dated Breakwater, Cape Town, January 27th, 1885 :—

"I wish to mention that a Snake was taken amongst the rocks in a pool of water and seaweed at the entrance to Table Bay, which, from the description given of it by those who found it, I have every reason to believe was a '*Pelamis bicolor*.' It was found by the

very intelligent children of Mr. John Saunders, Secretary to the Table Bay Harbour Board, and was seen by Mr. Saunders and others.

“Unfortunately it was not sent to me, but was killed, and thrown back into the sea. I think that I mentioned in a former letter that a very fine specimen of this Snake, taken in False Bay near Muizenburg and sent to me dead, is now in the South African Museum. Perhaps it is worthy of remark that this Snake, if I am correct as to its identity, having been found in Table Bay, had reached the Atlantic.”

A letter was read from Mr. B. Crowther, of Launceston, Tasmania, stating that he had in captivity some living examples of the Duck-bill (*Ornithorhynchus paradoxus*), which he was proposing to send home as a present to the Society's Menagerie. Details were added as to the best mode of keeping and feeding these animals in confinement.

Mr. Osbert H. Howarth exhibited and made remarks on a specimen of Coral of the genus *Dendrophyllia*, attached to a stone-ware bottle which had been dredged up in the Atlantic off Madeira at a depth of from 15-20 fathoms. The coral, when brought to the surface, was of a brilliant orange colour, and the tentacles of the animal were hanging from each branch.

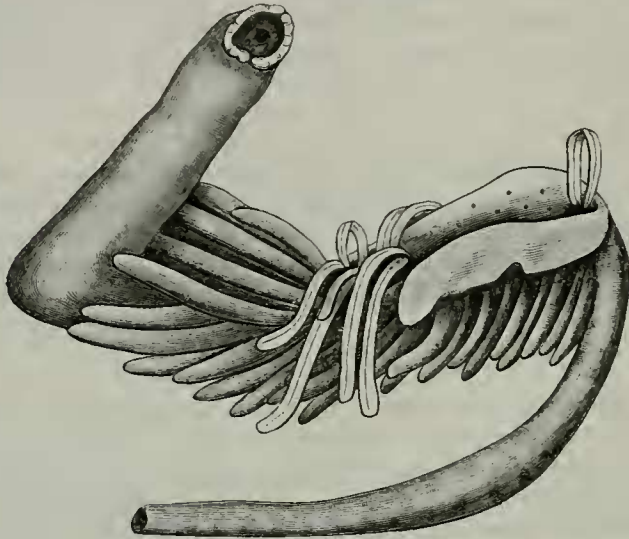
Mr. Howarth also exhibited and drew attention to the large number of shells found inside the bottle.

Mr. F. Day exhibited a specimen of the Vendace (*Coregonus vandesius*), which, he observed, was one of three (received from Mr. W. Kimsey Dover) that had been taken in Derwentwater and Bassenthwaite lakes, where Dr. Davy had recorded their occurrence in 1858, but whose statement has been generally overlooked. The Gwiniad (*C. coregonoides*) would seem to be restricted in the Lake district to Haweswater and the lake-system that joins the Eden.

Mr. Day also exhibited the diseased intestine of a Sea-Trout, which fish had been taken with the fly by Mr. A. Caldwell in the Esk on May 1st. It was $\frac{1}{4}$ lb. in weight and in excellent condition, but when landed its abdomen was observed to be “swollen as if it had a stone inside.” On being opened, the commencement of the small intestine was seen to be as represented in the accompanying figure (p. 484). A slit $\frac{2}{5}$ of an inch long existed along it, and the edges were everted, occasioning this spot to be like an open ditch with an orifice at the commencement, and its termination leading into the intestinal canal. Either opening was almost choked up by worms (*Bothriocephalus*), but it was found that the intestines below the seat of injury contained undigested food similar to what was in the stomach above it. There was no adhesion between the intestine and the abdominal walls;

which, however, must have acted so as to prevent the escape of food into the abdominal cavity.

Mr. Day likewise exhibited a portion of the sifting-apparatus of the Basking Shark (*Selache maxima*) which had been captured off Dendmans on May 6th. These branchial combs or teeth had been



Intestines of diseased Trout.

fully described by Prof. Turner. The food taken from the Shark's stomach was exhibited, and had the appearance of "red stuff like bruised crabs, or the roe of the Sea-Urchin, as described by Low," and in the pharynx were quantities of sessile-eyed crustaceans, mostly Amphipoda and Copepoda in a fresh condition, and evidently what the substance in the stomach originally consisted of, as was further proved by a microscopic examination. The specimen was a female over eleven feet long, and the longest tooth in its jaws was 0.09 of an inch.

The following papers were read :—

1. Notes on the Pinnipedia.

By ST. GEORGE MIVART, V.P.Z.S.

[Received April 16, 1885.]

To the question whether or not the group of Pinnipeds should form a distinct order of Mammalia, modern science adds that concerning their genetic affinities. This latter inquiry suggests another question, namely, the question whether the group is genetically